

CHESTERTON (CAMBS.)
RURAL DISTRICT COUNCIL

REPORT

For the Year 1907

BY

BUSHELL ANNINGSOON, M.D., M.A.

*Cambridge University Lecturer in Medical Jurisprudence ; Examiner in
State Medicine in the Universities of Cambridge and Birmingham ;
Fellow and late Member of the Council
and late Member of the Board of Examiners, The Royal
Sanitary Institute ; Fellow and Member of the Council
Royal Inst. Public Health ; Ex-President, Eastern Counties Branch
Soc. Med. Off. Health ; For. Assoc. Mem. Soc. Française d'Hygiène ;
Assist. Examiner Science and Art Department, South Kensington ;
Associate King's College, London, &c., &c.*

Medical Officer of Health.

Cambridge

J. PALMER, ALEXANDRA STREET

1908



Digitized by the Internet Archive
in 2017 with funding from
Wellcome Library

<https://archive.org/details/b29522900>

REPORT.

I beg leave to communicate to the Chesterton Rural District Council my Annual Report for the year 1907 on "the conditions affecting health in the District, and . . . the means for improving these conditions," and in addressing myself to this task I have to point out to the Council that by the "Memorandum as to Annual Reports of Medical Officers of Health," issued by the Local Government Board, I am directed to discuss prescribed subjects, and give information which may seem superfluous to the Council. The following extract from the Memorandum will make clear the intention of the Local Government Board :—

"As subjects concerning which the Board desire to obtain, through Annual Reports of the Medical Officer of Health, not only definite general information, but record also of particular changes of condition that may have occurred incidentally or by action of the local authority, the following deserve to be especially borne in mind :—

"Physical features and general character of the District.

"The chief occupations of the inhabitants, and the influence of any particular occupation on public health.

"House accommodation, especially for the working classes : its adequacy and fitness for habitation. Sufficiency of open spaces about houses, and cleanliness of surroundings. Supervision over erection of new houses.

"Action under the Housing of the Working Classes Act.

"Sewerage and drainage : its sufficiency in all parts of the District. Condition of sewers and house drains. Method or methods of disposal of sewage. Localities where improvements are needed.

- “Pollution of rivers and streams in the District, the sources and nature of such pollution, and any action taken to check it.
- “Excrement disposal: system in vogue; defects, if any.
- “Removal and disposal of house-refuse—whether by public scavenger or occupiers: frequency and method.
- “Water-supply of the District or its several parts: its source (from public service or otherwise), nature (river water, well water, upland water, etc.), sufficiency, wholesomeness, and freedom (by special treatment or otherwise) from risks of pollution.
- “Places over which the Council have supervision, *e.g.*, lodging-houses, slaughter-houses, bake-houses, dairies, cowsheds and milkshops, factories and workshops, and offensive trades.
- “Schools (especially Public Elementary Schools), sanitary conditions of, including water supply; action taken in relation to the health of the scholars, and for preventing the spread of infectious disease.
- “Bye-laws: steps taken for their enforcement and need of amendment, or of further bye-laws.
- “Nuisances: proceedings for their abatement—any remaining unabated.
- “Methods of dealing with infectious diseases: notification; isolation hospital accommodation and its sufficiency; disinfection.

“With regard to such points it should be remembered that these reports are for the information of the Board and of the County Council as well as of the Council of the District, and that a statement of the local circumstances and a history of local sanitary questions, which may seem superfluous for the latter, may often be needed by the former bodies.”

In reference to Schools it is desired to draw particular attention to the Memorandums on Medical Inspection of Children in Elementary Schools, issued by the Board of Education in November of this year, dealing with the new duties thrown upon Local Education Authorities in this respect by Section 13 of the Education (Administrative Provisions) Act, 1907.

Section 132 of the Factory and Workshop Act, 1901, which came into force on January 1st, 1902, requires that the Medical Officer of Health of every District Council shall, in his annual report to them report specifically on the administration of this Act in workshops and workplaces, and he shall send a copy of his annual report, or so much of it as deals with this subject, to the Secretary of State.

I.—VITAL STATISTICS.

It would appear from the Census of 1901 that there had been during the intercensal period an increase in the population in the Fulbourn and Willingham sub-districts respectively; but as these alterations have been due to increase in the constituent parishes of Cherryhinton and Impington, due mainly to migration, and not so much to natural increase of population, the employment for calculation of the arithmetic mean is fairer than that of the geometric mean. By the adoption of this method I estimate the population of Fulbourn, after deduction of the 586 persons enumerated at the Asylum, at 7264, and that of Willingham at 9376.

Vital Statistics.
Population.

The total number of deaths registered is 330. The deaths in public institutions outside the district of persons belonging thereto are respectively 19 in the Workhouse and 20 in Addenbrooke's Hospital, 1 in St. Peter's Hospital, London, and 2 in Infectious Diseases Hospital, which must be added, while the deaths in public institutions within the district of persons not belonging thereto are 49 in the County Asylum at Fulbourn, which must be subtracted. The corrected number is 323, equal to a death-rate from all diseases of 13·58 per thousand living per annum. The mean rate of the previous ten years is 14·4. The death-rate in England and Wales for the year 1907 is given as 15·0 in the Summary of the Registrar-General, contained in the appendix to his Report for the last quarter of the year.

Deaths and
Death-rate.

There have been 12 deaths in the group of epidemic diseases, viz.: from Diphtheria 4, Diarrhoea 3, Enteric Fever 1, Whooping Cough 4. The death-rate from these diseases is 0·46 per thousand.

Epidemic
Death-rate.

There have also occurred 14 deaths due to Influenza.

Influenza.

The number of births registered is 513, equal to a birth-rate of 21·57 per thousand per annum, 1·43 below the mean rate for the previous ten years (23·0). The birth-rate for England and Wales for the year 1907 is given as 26·3, which is lower than the rate in any other year on record.

Births and
Birth-rate.

The ratio of deaths under one year of age to 1000 registered births is 74. The mean rate for the previous ten years is 92.

Infantile
Mortality.

After assigning to each of the sub-districts its share of the deaths in the above three public institutions, as per subjoined table, the vital statistics are respectively:—Fulbourn, general death-rate 11·96, epidemic death-rate 0·4, birth-rate 23·96; Willingham, general death-rate 12·05, epidemic death-rate 0·5, birth-rate 21·5, Shelford, general death-rate 15·09, epidemic death-rate 0·5, birth-rate 19·05.

SUB-DISTRICT.	Regis- tered Deaths.	Ad. Hos. I. D. H. St. Peter's Hospital London.	Work- house.	County Asylum.	Total.	Death Rate.
Fulbourn 	84*	8	4	1	97	11·96
Willingham 	100	8	9	1	118	12·05
Shelford 	91	7	6	4	108	15·09
Entire District ...	275*	23	19	6	323	13·58

Comparing the birth-rate of the several sub-districts with the mean rate for the previous ten years, it would appear that the birth-rates of the Willingham and Fulbourn sub-districts are respectively 1·5 and 3·9 per thousand below the mean, and the rate for the Shelford sub-district 0·96 above it.

Comparing the death-rates in the same way, it would appear that the rates of the Fulbourn and Willingham sub-districts are respectively 2·44 and 2·35 below the mean; and the rate of the Shelford sub-district 0·69 above it.

Phthisis. The number of deaths from Phthisis among persons belonging to the district is 27, and the death-rate per thousand living is 1·13.

Cancer. The number of deaths from Cancer among persons belonging to the district is 27, and the death-rate per thousand living is 1·13.

Diarrhœa. The deaths and death-rates from Diarrhœa, Phthisis, and Cancer in the district among persons belonging thereto during the previous ten years are set out in the following table:—

* Exclusive of death in Public Institutions.

	Diarrhœa.		Phthisis.		Cancer.	
	Deaths.	Death-rate.	Deaths.	Death-rate.	Deaths.	Death-rate.
1897	6	0·25	22	0·93	34	1·44
1898	26	1·10	33	1·39	27	1·14
1899	10	0·42	26	1·10	18	0·76
1900	3	0·12	27	1·14	21	0·88
1901	1	0·04	23	0·97	32	1·35
1902	0	0·00	25	1·05	25	1·05
1903	1	0·04	17	0·71	26	1·09
1904	4	0·16	18	0·76	23	0·97
1905	1	0·04	15	0·63	27	1·13
1906	8	0·34	22	0·09	31	1·31
Annual Average	—	—	—	—	—	—
for years 1897—1906 ...	5·2	0·21	22·8	0·87	26·4	1·11

II.—DISEASE INCIDENCE.

The number of cases of infectious disease, notified exclusive of “non-residents” in Fulbourn Asylum, during the year is 125 (seven fatal). The number of cases notified each year during the previous ten years is as follows:—74 in 1897, 70 in 1898, 103 in 1899, 99 in 1900, 51 in 1901, 102 in 1902, 101 in 1903, 72 in 1904, 95 in 1905, and 93 in 1906; total 730. The mean case-rate is 3·0.

Disease
Incidence.

No case of Small-Pox has been notified in the district during the year, and twelve cases (two fatal) have been notified in the district during the previous ten years.

Small-Pox.

Fifty-four cases of Scarlet Fever (none fatal) have been notified during the year.

Scarlet Fever.

Ten cases occurred at Cottenham during January and February in continuation of the epidemic of the previous year; two cases at Quy in January, which were imported; six cases occurred at Oakington in five households, four during January and two in March: school assemblage was with little doubt the source of infection; ten cases occurred at Cherryhinton, distributed over several months of the year, February, May, June, July, and September; one at Rampton in March was connected with the Cottenham cases; one case at Great Wilbraham in June was distinctly imported; one at Coton and Grantchester respectively in July could not be traced; five cases at Fulbourn during December, and an earlier case in

July was imported; one case occurred at Girton in July; fifteen cases occurred at Histon, six cases in two households during August, four in as many households in November, and five in one household in December: school assemblage would seem to have been a factor in the spread and persistence of the disease; one case at Dry Drayton was caught from a previously unsuspected case.

The number of cases of Scarlet Fever notified, and the number of deaths registered in the district during each of the ten years 1897—1906, are set out in the following table:—

	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	Total
Cases ...	23	19	58	44	12	44	58	29	39	39	365
Deaths ...	—	—	—	—	—	—	1	—	—	—	1

Diphtheria.

Twenty-five cases of Diphtheria (four fatal) in twenty-two households have been notified during the year.

One case occurred at Fen Ditton in January, and was doubtless a remanent of the epidemic at the end of the previous year; a second (sporadic) case occurred in November. At Horningsea two cases occurred in January and two in June; one of the January cases was removed into the Isolation Hospital, Cambridge. At Cherryhinton one case occurred in each of the months of February, August, October, and November; two of them were removed into the Isolation Hospital. At Cottenham six cases in five households occurred, four in March and two in November; three of the March cases ended fatally, and three cases were removed into the Isolation Hospital. Four cases (one fatal) occurred at Fulbourn, one in May, which appeared to have been imported from Cambridge, and three in November. One at Waterbeach in May, which may have been associated with bad sanitary conditions; one at Little Wilbraham in the same month; and three in two households at Histon in August and September.

The number of cases of Diphtheria notified, and the number of deaths registered in the district during each of the ten years 1897—1906, are set out in the following table:—

	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	Total
Cases ...	15	15	24	21	17	16	8	19	19	39	193
Deaths...	2	2	2	1	—	—	1	1	1	3	13

Twenty cases of Typhoid Fever have been notified during the year. Eighteen occurred in the County Asylum at Fulbourn (4 fatal).

Of the two notified cases, one at Harlton the notification was withdrawn; the other case was at Waterbeach. The fatal case was that of a person belonging to the district who died in the Asylum.

The number of cases of Typhoid Fever notified, and the number of deaths registered in the district during each of the ten years 1897—1906, are set out in the following table:—

	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	Total
Cases ...	7	11	3	5	3	21	5	5	12	4	76
Deaths ...	2	—	—	—	1	1	2	—	1	—	7

No case of Continued Fever has been notified during the year, and only two cases have been notified during the previous ten years.

Continued
Fever.

Seven cases of Puerperal Fever have been notified during the year.

Puerperal
Fever.

The number of cases of Puerperal Fever notified, and the number of deaths registered during each of the ten years 1897—1906, are set out in the following table:—

	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	Total
Cases ...	7	1	1	—	2	1	4	2	1	2	21
Deaths ...	1	—	—	—	1	—	—	2	—	—	4

Thirteen cases (none fatal) of Erysipelas have been notified during the year; the sanitary conditions have been examined, and in several instances these have been found defective, and have been improved.

Erysipelas.

The number of cases notified, and the number of deaths registered during each of the ten years 1897—1906, are set out in the following table:—

	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	Total
Cases ...	22	24	17	29	16	20	15	19	23	15	200
Deaths ...	—	3	—	—	1	—	—	—	1	—	5

III.—PHYSICAL FEATURES AND GENERAL CHARACTER OF THE DISTRICT.

Physical
Features.

The thirty-seven parishes constituting the Chesterton Rural District are grouped pretty evenly round the Urban Districts of Cambridge and Chesterton. Those on the E.S.E. side of the Rhee and Cam are more closely grouped than those on the W.N.W. side, and are healthily situated on the chalk at a somewhat higher elevation than the latter, with the exception of Harlton and Grantchester, which are situated on chalk outliers; those on the W.N.W. side rest on the gault. Cottenham on the N. is situated partly on the gravel and greensand, and Oakington partly on kimeridge and greensand. All along the Cam valley springs arise from between the base of the lower chalk and the gault, affording with the general water-bearing stratum an abundant and excellent supply of water, where not polluted by local circumstances. The water on the W.N.W. side may be obtained by piercing through the gault into the greensand, or by utilising the patches of gravels of various origins which are dotted about the district. These unfortunately are too liable to pollution by the local circumstances, with certain exceptions, to afford a safe supply. In certain of the parishes to the N. there are extensive Fen lands.

The chief industries are Agriculture, Fruit-growing, and Preserve manufacture, the two latter giving employment to a number of workers throughout the year. Another industry, viz., manufacture of cement from the chalk marl, is extending along the Cam valley in the south of this district.

IV.—HOUSE ACCOMMODATION.

House Accom-
modation.

With regard to supervision over the erection of new houses in the district, building by-laws have been in operation for several years at Cherryhinton, Grantchester, Trumpington, and Fen Ditton. With regard to the other villages, although there is no official supervision, a water certificate as required by Section 6 of the Public Health (Water) Act, 1878, is insisted upon before occupancy in every instance.

During the year fifteen houses in various parishes, exclusive of Dry Drayton and Fen Ditton, which were reported as being unfit

for human habitation, have been, on notice from the Inspector, placed in habitable repair.

House-to-house inspection has been made in the parishes of Longstanton St. Mary and All Saints, Fulbourn, Cherryhinton, Coton, Stapleford, besides Dry Drayton and Fen Ditton.

Five cases of overcrowding have been reported during the year: one case at Stapleford and one at Comberton have been abated on notice from the Inspector of Nuisances by enlargement of the cottages; one at Waterbeach and one at Cottenham by provision of an additional bedroom; one at Shelford by removal to a larger dwelling-house.

During the year 69 new houses have been erected in the district, viz. at Cherryhinton 14, Grantchester 15, Trumpington 2, and Fen Ditton 2; total 33, in parishes in which building by-laws are in force; and at Cottenham 2, Great Shelford 7, Harston 6, Histon 8, Madingley 2, Waterbeach 2, Girton 1, Rampton 3, Oakington 2, Teversham 2, Longstanton All Saints 2; total 37, outside the by-law area.

V.—SEWERAGE AND DRAINAGE.

A new 9-inch glazed pipe drain with cement joints has been laid in Cow Lane, Fulbourn, to replace an open ditch.

Sewerage and
Drainage.

New glazed pipe drains with cement joints and trapped gullies, etc., have been provided to 74 houses on notice being served, and 34 house drains have been repaired.

The Charterhouse ditch at Grantchester, mentioned in previous reports, has been piped during the year.

At Coton a new drain has been laid from opposite Long View along the road to the brook to abate a nuisance caused by an open ditch near inhabited houses; at Great Wilbraham a new 6-inch glazed pipe drain has been laid from the pond along the village street to the clay pits opposite the chapel; at Willingham a ditch into which the road drain, opposite the Public Hall, discharges has been piped with 9-inch glazed pipes.

A nuisance has been caused by waste water from the laundry at Girton discharging into the public ditch running through Histon parish. Notice has been served on the owners, who have

signified their intention to carry out the necessary works to abate the nuisance.

At Horningsea a new surface-water glazed pipe drain has been laid in High Street.

In pursuance of a report on the unsatisfactory working of the cesspool system for a group of new houses along the Hills Road in Trumpington parish, a new sewer has been laid and connected with the Cherryhinton sewer, and in consequence the cesspools are now being abolished.

VI.—EXCREMENT DISPOSAL.

Excrement
Disposal.

In most of the villages there are still pit privies remaining, but these are being gradually substituted by pail closets or earth closets. In instances where these pit privies and soakage cesspools are situated over or penetrate into the water-bearing chalk and gravel patches, there is danger of pollution of the water supply, but there does not appear to be any legal remedy to prevent this form of pollution of a general water supply. At Fulbourn and Cherryhinton nearly all the old defective pit privies have been abolished, and pail-closets substituted with a few exceptions, where water-closets or improved privies with watertight receptacles constructed of brickwork in cement have been provided. 135 privies have been converted into pail, earth, or improved closets (*vide* Table). In some of the better class houses there are water closets connected with cesspools.

At St. John's Ward, Cherryhinton, and Newnham Croft, Grantchester, there are water closets, many of which are only hand flushed.

The excrement from both pit privies, pail closets, and earth closets is disposed of on garden ground.

VII.—REMOVAL AND DISPOSAL OF HOUSE REFUSE.

Removal of
Refuse.

The only parishes where the removal of house refuse is carried out by public scavenger are St. John's Ward, Cherryhinton, and Newnham Croft, Grantchester. In the other villages in the district the refuse is disposed of by the occupiers.

It would be desirable if a scheme of scavenging could be devised for some of the larger villages, especially Cottenham, Willingham, and Fulbourn, where some of the houses are situate in confined areas, and there being no proper sewer the pail system of closet is largely in use, and the contents of the pails are frequently emptied with the house refuse in one corner of the small yards adjoining the houses, and frequently cause a nuisance injurious to health. During the year a large number of these accumulations have been removed in compliance with verbal requests.

VIII.—WATER SUPPLY.

The water supply in the several villages which constitute the district is very unequal, both in quantity and quality, owing to their geological position. Water Supply.

Those villages situate on the chalk or large gravel patches could get an abundant supply if it were not locally polluted; others again could get a supply both abundant and wholesome from the lower greensand; others again have none of these opportunities.

Here, as in certain other districts which I serve, the need for some central authority, or Board, which could take in hand the equalisation and preservation from pollution of the water supply of a large area is very manifest.

The following villages obtain their water supply from the Cambridge University and Town Waterworks Company, viz., Cherryhinton and Fulbourn (where the pumping stations and reservoir are situated), and Great Shelford, Trumpington, Newnham Croft, Grantchester, Histon, and Impington from extensions of the Company's mains.

At Rampton the water-supply difficulty has been overcome, as the suggestion, which I made in my report for the year 1904, to obtain a supply from the Cottenham Waterworks, has been carried into effect.

A new pump and platform has been provided at Milton.

Sixteen samples of water have been analysed by the Analyst during the year, with a result that ten samples have been found to be polluted.

With regard to the ten polluted wells, seven have been closed and improved supplies provided, and one well has been cleaned out, and on analysis found satisfactory.

One of these wells is at Stapleford, and has not been closed, as a better supply is not available. The question of a water supply for Stapleford has been before the District Council on several occasions, and in 1906 it was referred to the Parochial Committee for consideration, but no further action has been taken. Another of these samples was taken from the public pump at Mill Lane, Histon, which will probably be supplied from the Cambridge Waterworks in the near future.

Certificates under Section 6 of the Public Health (Water) Act, 1878, have been granted during the year for the occupation of 69 newly-erected houses, 45 of which are supplied with water from the Cambridge University and Town Waterworks Company's mains, 7 from other public supplies, and 17 from private sources.

With regard to the four new houses at Milton, mentioned last year as having been occupied without first obtaining a certificate under Section 6 of the Public Health (Water) Act, 1878, legal proceedings have been taken and a fine imposed.

IX.—PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

The Dairies, Cowsheds, and Milkshops' Order is in operation in the district. Under the Inspector's instructions improvements are being made in old cowsheds, and also new sheds are being erected.

Dairies and Cowsheds.

Dairies and Cowsheds.—All the known dairies and cowsheds in the district have been inspected. Some of them certainly require amendment; but I may be allowed to remark that in a district where the cows are in sheds for very short periods, or where they are kept in open sheds or yards, less stringency would seem to be needful than in other circumstance. Apart from the question of the health of the cows themselves, the great consideration is the cleanly production of milk, and I am inclined to think that this

object could be obtained by the provision of specially-constructed milking sheds placed not actually in the stock-yard, but adjoining, or when possible on an adjoining grass field, and having a sloping cement floor, with just enough litter to prevent slipping, and a drain-channel, etc. If some such arrangement as the above could be made, and the milk cans conveyed for cooling, separating, etc., to a dairy constructed on good sanitary principles, there would be small risk of befoulment of the milk.

The slaughter-houses, dairies, cowsheds, and milkshops have been periodically inspected during the year, and ten cowsheds have been structurally improved, and one new dairy on modern lines has been erected.

Inspections.

The knackeries at Cherryhinton and Willingham respectively have been inspected as usual by the Inspector of Nuisances. On application the licenses have been renewed by the Council.

X.—FACTORIES AND WORKSHOPS.

Factories.—There are at present recorded five non-textile factories in the district, where more than forty persons are employed, viz., 1 Jam Factory, 2 Laundries, and 2 Cement Works; these have all been examined with regard to the provisions of escape in case of fire.

Factories and Workshops.

Workshops.—Inspections of the workshops in the district have been made during the year, with a result that some were found not to be kept in a cleanly state, and in others nuisances of a minor character were discovered; all the nuisances have been abated either after notice or on the verbal request of the Inspector of Nuisances.

Smoke Nuisance.—Complaints have been again received *re* smoke nuisances from a factory chimney at Cherryhinton; notice was served on the owner to abate the same by using hard steam coal, and to, as far as possible, consume the smoke. A new boiler has now been fixed in order to abate the nuisance.

Bakehouses.—On May 1st and September 1st respectively circular letters explaining the requirements of Sec. 99 of the Act were sent to all the occupiers of the bakehouses in the district,

together with a request that the requirements of the Section be carried out in May or September as the case may be. It was found that the occupiers had complied with the request. There are 47 bakehouses in the district, none of which are underground. The drainage from the bakehouses has been improved.

Notices of occupation of 13 workshops have been received from H.M. Inspector under Sec. 127.

Homework.—During the year lists containing the addresses of 262 outworkers residing in this district have been received from the Borough of Cambridge. Inspections of premises where homework is done have been made during the year, and in many instances notices have been served for the abatement of nuisances and these have been complied with, and in a number of instances nuisances have been abated after verbal request. In five instances it has been necessary to prevent homework being done in houses where infectious diseases existed, and in the instances where homework was on the premises it was disinfected.

Register of Workshops.—The number of workshops now on the register is 276, and includes 47 bakehouses, 37 smiths, 38 carpenters, 32 bootmakers, 10 basketmakers, 19 wheelwrights, 19 dressmakers, 13 cycle shops, 9 tailors, 9 plumbers, 9 brewers, 8 saddlers, 3 laundries, 2 aerated water makers, and 21 sundries.

XI.—NUISANCES.

Nuisances.

Nuisances of various kinds, as indicated in the Inspector's table appended to this report, have been dealt with.

XII.—METHODS OF DEALING WITH INFECTIOUS DISEASES.

Isolation Hospital, etc.

The methods of dealing with infectious diseases are by notification followed by inquiry on the part of the Medical Officer of Health or Inspector of Nuisances, or by both, according to the importance of the cases.

The Isolation Hospital has proved of great service. A new wash-house and coal-shed have been added, and it is proposed to erect another ward to accommodate twelve patients. A medical officer has been appointed to attend the patients.

The total number of cases admitted during 1907 has been 31, all of whom made good recoveries.

The Schools' Authorities are informed of the households in which infectious diseases have appeared, with a request to exclude all the members until they are free from infection. When epidemic influence shows a tendency to spread, the Schools' Authorities are asked to close the Schools.

In threatened outbreaks of Diphtheria, prophylactic doses of Antitoxin are recommended for the protection of persons known to have been exposed to the chance of infection, and bacterial examinations of rubbings from the throats and nasal passages of all known "contacts" are recommended for the discovery of any unsuspected cases of the disease.

At the conclusion of a case of infectious disease the infected rooms and the articles contained therein are disinfected by aerial disinfectants, but there is no machinery in the district for disinfection by heat or steam.

Some machinery is desirable for the disinfection required under the Midwives' Act, and also for disinfection of rooms recently occupied by phthisical persons.

XIII.—ADOPTIVE ACTS.

The Infectious Disease (Prevention) Act, 1890, and the Public Health Acts (Amendment) Act, 1890, are not in operation in the district, but have been under the consideration of the Council, and details referred to the Sanitary Committee. Adoptive Acts.

The Public Health Act Amendment Act, 1907, contains some provisions which would be valuable if adopted.

All the above remarks, together with the Statistical Tables required by the Local Government Board, and the Inspector's record of work, I respectfully submit for the consideration of the Rural District Council.

BUSHELL ANNINGSON.

TABLE I.

For the Whole of Chesterton Rural District.

Table showing Vital Statistics for the year 1907 and the antecedent ten years.

YEAR.	Population estimated to middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.				TOTAL DEATHS IN PUBLIC INSTITUTIONS IN THE DISTRICT.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	NETT DEATHS AT ALL AGES BELONGING TO THE DISTRICT.	
				UNDER ONE YEAR OF AGE.		AT ALL AGES.					Number.	Rate.*
		Number.	Rate.*	Number.	Rate per 1000 Births registered.	Number.	Rate.*					
1	2	3	4	5	6	7	8	9	10	11	12	13
1897.....	23577	509	21·5	52	102	321	13·6	43	39	35	317	13·4
1898.....	23596	559	23·6	71	127	363	15·4	48	39	35	359	15·2
1899.....	23616	525	22·2	61	116	366	15·5	49	48	27	345	14·6
1900.....	23635	566	23·9	38	67	358	15·1	62	57	30	331	14·0
1901.....	23655	553	23·3	45	81	330	13·9	68	65	34	299	12·6
1902.....	23655	509	21·5	40	78	333	14·0	57	54	35	314	13·2
1903.....	23655	586	24·7	51	87	324	13·6	63	57	28	295	12·4
1904.....	23655	505	21·3	52	103	342	14·4	59	56	29	315	13·3
1905.....	23655	537	22·6	43	80	354	14·9	69	58	35	331	13·9
1906.....	23655	555	23·46	46	82	334	14·1	41	35	29	328	13·86
Averages for years 1897—1906	23635	540	23·00	50	92	342	14·4	56	51	31	322	14·4
1907.....	23779	513	21·57	38	74	330	13·8	55	49	42	323	13·58

* Rates calculated per 1000 of estimated population.

NOTE.—The deaths included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term “Non-residents” is meant persons brought into the district on account of sickness or infirmity, and dying in Public Institutions there; and by the term “Residents” is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in Public Institutions elsewhere.

The Public Institutions taken into account for the purposes of this and the following tables are the Union Workhouse, Chesterton; County Asylum, Fulbourn; and Addenbrooke’s Hospital, Cambridge.

Area of District in acres (exclusive of area covered by water).....	78033.	At Census of 1901.
Total population at all ages	23655	
Number of inhabited houses	5546	
Average number of persons per house	4·2	

TABLE II.

Chesterton Rural District.

Table showing Estimated Population, Births, Corrected Deaths at all ages and Infant Mortality for the year 1907 and the antecedent ten years.

NAMES OF LOCALITIES.	1 Whole District.				2 Fulbourn.				3 Willingham.				4 Shelford.			
	Population.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population.	Births registered.	Deaths at all Ages.	Deaths under 1 year.	Population.	Births registered.	Deaths at all Ages.	Deaths under 1 year.
YEAR.	(a)	(b)	(c)	(d)	(a)	(b)	(c)	(d)	(a)	(b)	(c)	(d)	(a)	(b)	(c)	(d)
1897	23577	509	317	53	6988	133	99	22	9290	232	123	19	7299	144	95	12
1898	23596	559	359	71	7059	159	124	28	9278	223	118	21	7259	177	117	22
1899	23616	525	345	62	7131	156	86	16	9266	223	134	27	7219	146	125	19
1900	23635	566	331	40	7202	164	102	11	9254	230	126	17	7179	172	103	12
1901	23655	553	299	46	7274	177	93	17	9242	227	125	18	7139	149	81	11
1902	23655	509	314	42	7274	169	86	9	9242	194	128	20	7139	146	100	13
1903	23655	586	295	52	7274	194	83	25	9242	233	120	17	7139	159	92	10
1904	23655	505	315	52	7274	176	98	23	9242	188	112	12	7139	141	105	17
1905	23655	537	331	43	7274	163	90	6	9242	218	140	24	7139	156	101	13
1906	23655	555	328	46	7274	209	93	10	9242	192	128	16	7139	154	107	20
Averages of years 1897—1906	23635	540	323	51	7202	170	95	17	9254	216	125	19	7179	154	103	15
1907	23779	513	322	38	7264	174	99	15	9376	203	118	10	7139	136	108	13

NOTES.—(a) The separate localities adopted for this table are areas of which the populations are obtainable from the census returns. Block 1 is used for the whole district, and blocks 2, 3, and 4 for the several localities.

(b) Deaths of residents occurring in public institutions beyond the district are included in sub-columns c of this table, and those of non-residents registered in public institutions in the district excluded. (See note on Table I. as to meaning of terms “residents” and “non-residents.”)

(c) Deaths of residents occurring in public institutions whether within or without the district are allotted to the respective localities, according to the addresses of the deceased.

TABLE III.
Chesterton Rural District.
Cases of Infectious Disease notified during the Year 1907.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.						TOTAL CASES NOTIFIED IN EACH LOCALITY.				Number of cases removed to Isolation Hospital, Oakington.	Cases removed to Borough I. D. H.
	At all Ages.	At Ages—Years.					1 Fulbourn.	2 Willingham.	3 Shelford.	4 Fulbourn Asylum.		
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.						
Small Pox...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria ...	25	...	4	15	2	4	14	11	...	...	2	6
Membranous Croup	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas...	19	...	...	2	1	13	3	10	6	...	...	...
Scarlet Fever ...	54	...	14	29	11	...	17	34	3	...	29	...
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever ...	20	...	...	1	...	19	...	2	...	18	...	...
Relapsing Fever ...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever ...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Fever ...	7	...	...	...	1	6	3	3	1	...	...	...
Plague ...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	125	...	18	47	15	42	37	60	10	18	31	6

NOTE.—The localities adopted for this table are the same as those in Tables II. and IV. An Isolation Hospital for cases of any infectious diseases other than Small Pox was erected during the year 1906.

TABLE IV.
Chesterton Rural District.

Causes of Death at several age periods during the Year 1907.

CAUSES OF DEATH.	DEATHS IN OR BELONGING TO WHOLE DISTRICT AT SUBJOINED AGES.							DEATH IN OR BELONGING TO LOCALITIES (AT ALL AGES).			TOTAL DEATHS IN PUBLIC INSTITUTIONS IN DISTRICT.
	All ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Fulbourn.	Willingham	Shelford.	
1	2	3	4	5	6	7	8	9	10	11	12
Small Pox	...	...	...	...	...	...	...	...	...	...	...
Measles.....	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...
Whooping Cough	4	3	...	1	...	...	...	2	...	2	...
Diphtheria and Membranous Croup	4	...	...	4	...	...	...	1	3	...	...
Croup	...	...	...	...	...	...	...	...	...	...	...
Fever { Typhus	...	...	...	...	...	...	...	...	...	...	...
Enteric	1	...	...	...	...	1	...	...	1	...	4
Other continued	...	...	...	...	...	...	...	...	...	...	...
Epidemic Influenza.....	14	2	...	...	...	5	7	2	3	9	1
Cholera	...	...	...	...	...	...	...	...	...	...	...
Plague	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea	3	2	1	...	...	...	...	...	1	2	...
(See notes opposite)											
Enteritis	2	...	...	...	...	...	2	...	1	1	2
(See notes opposite)											
Puerperal Fever	2	...	...	...	...	2	...	1	1	...	...
Erysipelas	...	...	...	...	...	...	...	...	...	...	...
Other septic diseases ...	2	...	...	1	...	1	...	1	1	...	...
Phthisis	27	1	...	...	7	17	2	4	15	8	9
Other tubercular diseases	11	...	4	2	1	4	...	3	5	3	2
Cancer, malignant disease.....	27	...	...	...	...	13	14	10	7	10	1
Bronchitis.....	22	1	...	2	...	2	18	11	10	2	1
Pneumonia	13	2	1	...	1	5	4	4	3	6	6
Pleurisy	...	...	...	...	...	...	...	...	...	...	...
Other diseases of Respiratory Organs.....	2	...	...	...	...	1	1	2	...	...	...
Alcoholism. Cirrhosis of liver	4	...	...	...	...	2	2	1	2	1	...
Venereal diseases.....	...	...	...	...	...	...	...	...	...	...	...
Premature birth	10	10	...	...	...	...	...	4	3	3	...
Diseases and accidents of Parturition.....	...	...	...	...	...	...	...	...	...	...	...
Heart diseases	43	...	...	...	2	9	32	7	15	21	10
Accidents	6	1	1	...	1	3	...	3	3	...	...
Suicides	3	...	...	...	...	2	1	3	...	...	...
Not certified.....	...	...	...	...	...	...	...	...	...	...	...
All other causes	122	16	6	...	9	18	73	38	44	40	19
All causes.....	323	38	13	10	21	85	156	97	118	108	55

NOTES TO TABLES IV. AND V.

- (a) In Table IV., all deaths of "Residents" occurring in public institutions, whether within or without the district, are to be *included* with the other deaths in the columns for the several age groups (columns 2—8). They are also, in columns 9—15, to be *included* among the deaths in their respective "Localities" according to the previous addresses of the deceased as given by the Registrars. Deaths of "Non-residents" occurring in public institutions in the district are in like manner to be *excluded* from columns 2—8 and 9—15 of Table IV.
- (b) See notes on Table I. as to the meaning of "Residents" and "Non-residents," and as to the "Public Institutions" to be taken into account for the purposes of these Tables. The "Localities" in Table IV. should be the same as those in Tables II. and III.
- (c) All deaths occurring in public institutions situated within the district, whether of "Residents" or of "Non-residents," are, in addition to being dealt with as in note (a), to be entered in the last column of Table IV. The total number in this column should equal the figures for the year in column 9, Table I.
- (d) The total deaths in the several "Localities" in columns 9—15 of Table IV. should equal those for the year in the same localities in Table II., sub-columns c. The total deaths at all ages in column 2 of Table IV. should equal the gross total of columns 9—15, and the figures for the year in column 12 of Table I.
- (e) Under the heading of "Diarrhœa" are to be included deaths registered as due to Epidemic diarrhœa, Epidemic enteritis, Infective enteritis, Zymotic enteritis, Summer diarrhœa, Dysentery and Dysenteric diarrhœa, Choleraic diarrhœa, Cholera and Cholera Nostras.
 In addition, and as regards deaths of children *under one year of age*, under the heading "Diarrhœa" in column 3 (Table IV.) are to be included all deaths classified as "Diarrhœal diseases" in Table V.
 Under the heading of "Enteritis" in Table IV. are to be included only deaths *over one year of age* registered as due to Enteritis, Muco-enteritis, Gastro-enteritis, Gastric catarrh, Gastritis, and Gastro-intestinal catarrh, unless from information obtained by enquiry from the certifying practitioner or otherwise, the Medical Officer of Health should have reason for including such deaths, under the specific term "Diarrhœa." Deaths from diarrhœa secondary to some other well-defined disease should be included under the latter.
- (f) Under the heading of "Cancer" and "Puerperal fever" should be included all registered deaths from causes comprised within these general terms. Thus: Under "Cancer" should be included deaths from Cancer, Carcinoma, Malignant disease, Scirrhus, Epithelioma, Sarcoma, Villous tumour, Papilloma of bladder, and Rodent ulcer. Under "Puerperal fever" are to be included deaths from Pyæmia, Septicæmia, Sapræmia, Pelvic peritonitis, Peri- and Endo-Metritis occurring in the Puerperium.
- (g) Under "Congenital Defects" in Table V. are to be included deaths from Atelectasis, Icterus neonatorum, Navel hæmorrhage, Malformations and Congenital hydrocephalus.
- (h) Under "Tuberculous Meningitis" are to be included deaths from Acute hydrocephalus.
- (i) Under "Other Tuberculous Diseases" are to be included deaths from Tuberculosis, Tuberculosis of bones, joints and other organs, Lupus and Scrofula.
- (j) All deaths certified by registered Medical Practitioners and all Inquest cases are to be classed as "Certified;" all other deaths are to be regarded as "Uncertified."

TABLE V.

Chesterton Rural District.

Infantile Mortality during the Year 1907. Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.		Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under One Year.
All Causes.	Certified ...	11	...	2	...	13	7	3	1	2	2	...	2	6	2	...	...	38
	Uncertified	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Common Infectious Diseases.	Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chicken Pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Measles ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Scarlet Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Diphtheria: Croup	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	2
Diarrhoea Diseases.	Influenza...	...	...	...	...	...	1	...	...	...	...	...	1	1	...	...	...	3
	Whooping Cough	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	2
	Diarrhoea, all forms	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Enteritis (<i>not Tuberculous</i>)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Gastritis, Gastrointestinal Catarrh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
Wasting Diseases.	Premature Birth...	7	...	1	...	8	2	...	...	...	...	...	...	...	...	...	...	10
	Congenital Defects	3	...	...	...	3	1	...	...	...	...	...	...	...	...	...	...	4
	Injury at Birth ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Want of Breast-milk	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Atrophy, Debility, Marasmus	...	...	...	...	...	...	2	...	...	...	...	...	1	...	...	...	3
Tuberculous Diseases.	Tuberculous Meningitis...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Tuberculous Peritonitis: Tabes Mesenterica...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Other Tuberculous Diseases	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
	Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Syphilis ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rickets ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Meningitis (<i>not Tuberculous</i>)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Convulsions	1	...	...	...	1	...	1	1	1	...	...	...	1	1	...	...	5
	Bronchitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
	Laryngitis	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	2
	Pneumonia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
	Suffocation, overlaying	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	3
Other Causes		...	...	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...
TOTAL ...		11	...	2	...	13	7	3	1	2	2	...	2	6	2	...	...	38

REPORT OF THE INSPECTOR OF NUISANCES FROM JANUARY 1 TO DECEMBER 31, 1907.

Complaints received	...	...	...	...	...	92
Entries in journal	...	...	...	...	...	724
Notices served...	...	...	...	...	...	216
Legal proceedings	...	...	...	...	...	3
Slaughter-houses inspected	...	...	...	...	...	26
Bakehouses inspected	...	...	...	...	...	47
Houses placed in habitable repair (not including Fen Ditton and Dry Drayton)	...	...	...	...	...	15
Houses disinfected	...	...	...	...	...	72
Inquiries as to infectious disease	...	...	...	...	...	129
Cases removed to hospitals	...	...	...	...	...	37
Over-crowding cases dealt with	...	...	...	...	...	5
Certificates granted under Sec. 6 of the Public Health (Water) Act, 1878	...	...	...	...	...	69
Polluted wells closed	...	...	...	...	...	7
New houses connected with the Cambridge University and Town Water Company's main	...	...	...	...	...	45
Samples of water taken for analysis	...	...	...	...	...	18
Water-closets, earth or pail-closets, or improved privies constructed	...	...	...	...	...	135
Ditto, repaired or cleansed	...	...	...	...	...	6
House drains, new laid	...	...	...	...	...	74
Ditto, repaired or trapped	...	...	...	...	...	34
Ditto, cleansed	...	...	...	...	...	11
Foul ditches cleansed	...	...	...	...	...	9
Foul accumulations removed under notice	...	...	...	...	...	25
Animals improperly kept removed	...	...	...	...	...	6
Defects in sanitary arrangements at schools remedied	...	...	...	...	...	8
Trapped gulleys provided to road drains	...	...	...	...	...	18

F. BUNNETT,
Inspector of Nuisances.